

NOTES AND NEWS.

THE *American Naturalist* will hereafter be published by J. B. Lippincott & Co., of Philadelphia.

PROFESSOR JOHN M. COULTER was elected president of the Indiana Academy of Science for 1887.

IN THE GAZETTE for December, 1886, page 330, in "Explanation of Plate XI," *Carex gracillima* should read *Carex debilis*.

A PAPER on North American Geraniaceæ has been presented to the Boston Society of Natural History by Dr. Wm. Trelease.

THROUGH THE kindness of a member of the corporation, the botanical laboratory of Brown University is now equipped with six of Beck's "Star" microscopes.

IN THE GAZETTE for November, 1886, there is a mistake in Professor Scribner's plate on the Black Rot. In figure 8 the μ should be *mm*. The mistake was made in copying the figure.

AN INTERESTING fungus, *Boletus decipiens* B. & C., has been found in Niagara County, N. Y., by Dr. Charles E. Fairman. Hitherto it has only been collected in the southern states.

MR. PHILIP L. COBB, of Cleveland, O., writes that *Viola hastata* and a white flowered variety of *Cnicus arvensis* occur east of that city, and that *Lactuca Scariola* is common in and about the city.

M. ALPH. DECANDOLLE has just distributed a paper, from the *Archives des Sciences Physiques et Naturelles*, on the botanical origin of certain cultivated plants and the probable causes of the extinction of certain species.

EXPERIMENTS made by G. H. Whitcher (*Agricultural Science*, vol. I p. 30) appear to show that the aerial roots of corn (maize), which are produced most abundantly at the time of flowering, give off ammonia during their growth.

THE *Journal of Botany* (February) contains the description (with plate) of a fine new hepatic from Killarney, by Richard Spruce. It is called *Lejeunea Holtii*. A list of Jamaica mosses and Hepatics is also given by Henry Boswell.

SOCIETATUM LITTERÆ is the title of a small monthly in which Friedländer & Sohn, of Berlin, propose to give a bibliographic list of papers in natural history published by the societies of the world. It is 2 marks 50 pfg. a year, or about 60 cents.

THE *Bulletin of the Torrey Botanical Club* for February contains "Notes on Diatoms," by C. Henry Kain; "Note on the Inflorescence of *Camellia Japonica*," by E. E. Sterns, and "A Method of Drying Plants with Little Loss of Color," by Charles E. Smith.

IT IS VERY much desired to obtain copies of the January number of 1886 (Vol. XI, No. 1.) Any botanist having a duplicate copy would confer a great favor by sending it to the BOTANICAL GAZETTE, Crawfordsville, Ind. The regular price for single copies will be paid.

THE GAZETTE has received much commendation for its very full index of Vol. XI, issued with the December number of that year. It is proposed to make all the information contained in the GAZETTE as available as possible and exhaustive indexing will hereafter be one of its features.

At a recent meeting of the Philadelphia Academy, Miss Helen C. De S. Abbott announced the discovery of hæmatoxylin in the bark of *Saraca Indica*. It is another genus of the same order to which *Hæmatoxylin Campechianum* belongs, the only plant heretofore known to yield hæmatoxylin.

LORENZO G. YATES, of Santa Barbara, California, has published a list of Hawaiian ferns, with notes of locality, etc. Of the 129 species, ten are found in North America, five of which are Californian. Mr. Yates has also in preparation a similar list of the ferns of Ceylon, as well as a list of all known ferns, with synonymy, habitat, etc.

PROF. F. L. SARGENT gives in the *American Monthly Mic. Journal* for February an interesting paper "On the Schwendener Theory of the Constitution of Lichens." In this connection we must congratulate this journal upon its improved appearance. The abandonment of the two-column page is a decided change for the better.

MR. HENRY WILLEY, of New Bedford, Mass., is offering for sale his large collection of lichens and also his library. It is undoubtedly the most complete in this country after that of the late Professor Tuckerman. It would give any student of lichens in this country an unsurpassed opportunity for good work. The collection is valued at \$2,000.

MOST OF THE ornamental indigenous plants of the United States are kept for sale in small or large lots by Edward Gillett, of Southwick, Mass., also the seeds of many kinds. His annual catalogue for 1887 makes the tenth issue, and it is pleasant to note that the commercial demand shows an increased appreciation of native wild flowers and ferns.

THE "BOTANICAL SOCIETY of Western Pennsylvania" was organized in Pittsburgh, Pa., on October 21st, 1886, with twenty-five charter members from that city and vicinity. Prof. B. H. Patterson was elected president, and Dr. A. Pettit, secretary of the new society. Monthly meetings are held, preparatory to active field work during the coming season.

THE COLUMBUS (Ohio) Horticultural Society has published a very interesting volume of proceedings for 1886. With such botanists as Professors Townshend, Lazenby and Devol at work the botanical activity of the state is reported as increasing. The only criticism to be made upon this report is its sad lack of continuous pagination. The secretary's address is W. S. Devol, Columbus, O.

A SYNOPSIS of *Tillandsiæ* has been begun by J. G. Baker in the February *Journal of Botany*. The suborder is in great confusion and Dr. Baker's work will be most acceptable to botanists. It contains six genera, separated into two groups by the coalescence of petals into a tube or not. In the present paper the genus *Sodiroa* (with three species, one of them new) is considered and two species (out of eleven) of the genus *Caraguata*.

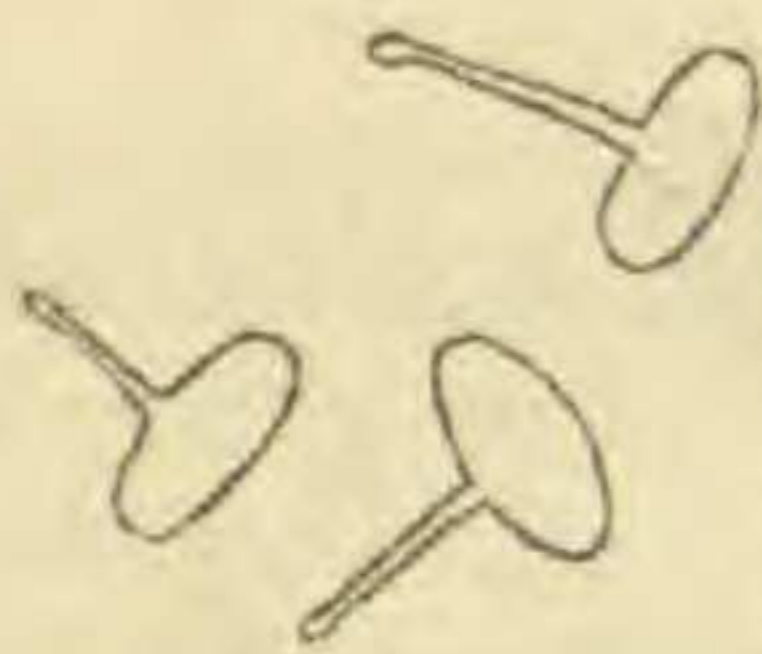
THE JOURNAL of the Elisha Mitchell Scientific Society of North Carolina for the year 1885-6 shows a commendable activity in the scientific circles of that state. This publication, of about one hundred and fifty pages, contains a great variety of papers, two of which are of great botanical interest, viz.: "A Sketch of the Life and Scientific Work of L. D. von Schweinitz," with portrait, seventeen pages, containing also complete bibliography; and the "Wilmington Flora," sixty pages, by Dr. T. F. Wood and Gerald McCarthy. The latter is a full catalogue of 1,202 species and varieties, representing 527 genera and 129 orders of phanerogams. The secretary's address is F. P. Venable, Chapel Hill, N. C.

THE LAST NUMBER (December) of *Drugs and Medicines* has just come to hand. It treats chiefly of *Lobelia inflata*. The drawings of the microscopic structure of various parts are unusually bad—in fact, not up to the average of college student's work. The illustrations of microscopic structure have never been on a par with the other illustrations. The editors of this excellent quarterly might profitably seek to improve the work in this direction.

DR. H. W. WILEY, of the Agricultural Department, has just distributed as Bulletin 14, the record of the recent experiments at Fort Scott, Kan., in the manufacture of sugar from sorghum and sugar canes. The results are very interesting from a scientific point of view, and suggest many problems for future investigation, but the "practical" result is best stated in Dr. Wiley's own words:

"It must be confessed that the chief object of this last series of experiments, viz.: to place the industry where private capital would see its way clear to its extension, has not been attained."

THE ACCOUNT of larval entomophthora, *E. Phytonomi* on *Phytonomus punctatus*, given in the January number for 1886, is supplemented by Mr. Arthur in his recent report to the New York Agricultural Experiment Station. It is found that the germination of the spores on the surface of water differs widely from germination under water. Instead of forming mycelium they put out short hyphæ of definite length, on each of which is born a single minute spore, as shown in the accompanying figure (x 200). Such spores are well adapted by their minuteness for long distance transportation through the air.



THE INDIANA Academy of Science is a young but very vigorous organization. After a meeting to organize, the first annual meeting was held at Indianapolis during the holidays. Over 100 persons, of various scientific taste and attainment, joined, and among them the botanists were well represented. Among the papers presented, those of botanical interest were "Origin of the Indiana Flora," John M. Coulter; "Mildews of Indiana," J. N. Rose; "Chlorophyll Bands of Spirogyra," Stanley Coulter; "Additions to the Indiana Flora," Geo. C. Hubbard. In addition to these, Prof. Chas. R. Barnes gave directions for the collection of mosses. Prof. Stanley Coulter's paper brought out certain peculiarities in the action of the young bands of *Spirogyra* under shock and will shortly be prepared for the readers of the GAZETTE.

DR. E. LOEW has published in the *Jahrbuch* of the Berlin Botanic Gardens the results of his extensive experiments upon the reciprocal relations of showy flowers and insects. The work was intended to supplement that of Hermann Müller. Müller's investigations were conducted with the native flora of Germany. Loew, however, substituted an artificial assemblage of flowers from various parts of the world, and tried to ascertain how far the insects would make the selections indicated by Müller. In general Müller's conclusions were corroborated, but the bee tribe often made different selections when foreign plants were brought into competition with indigenous ones. Of oriental flowers they preferred the deeper-colored ones, while the lighter-colored *Compositæ* among American plants were preferred.